

IN THE CLAIMS

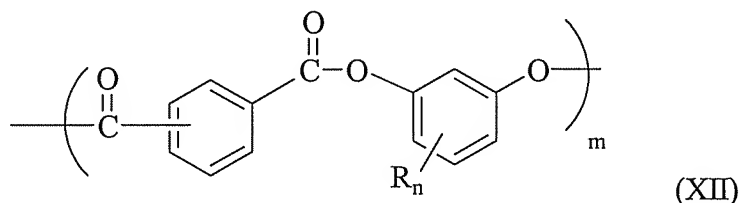
1. (Currently Amended) A method for ~~manufacturing photoaddressing~~ data storage media comprising:

providing a film comprising an organic polymer that comprises a resorcinol arylate copolyestercarbonate or a blend of resorcinol arylate polyester and a polycarbonate;

irradiating at least a portion of the film with a UV beam having a wavelength of about 290 to about 400 nanometers so as to impart an energy of about 1 to about 20 milliwatt/square centimeter to the irradiated portion of the film, wherein the irradiating produces a difference in refractive index of about 0.0001 to about 0.1 between an irradiated portion and an unirradiated portion of the film,

wherein the irradiating produces a pattern in the film.

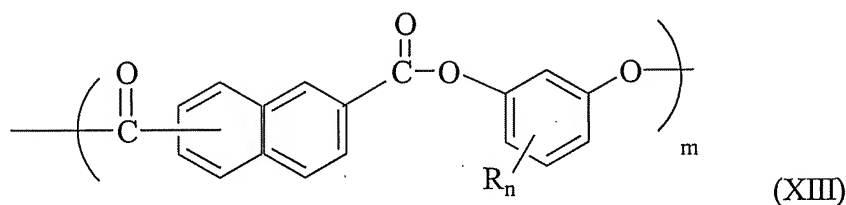
2. (Original) The method of Claim 1, wherein the resorcinol arylate polyester has the structure of formula (XII)



wherein R is at least one of C₁₋₁₂ alkyl or halogen, n is 0 to 3, and m is at least about 8.

3. (Currently Amended) The method of Claim 2, wherein m is about 10 ~~and to~~ about 300.

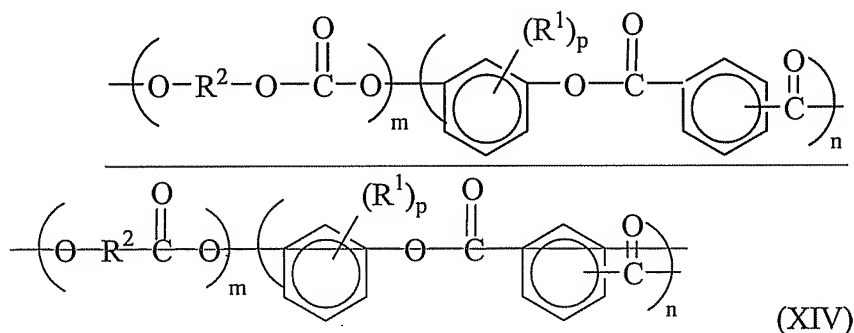
4. (Original) The method of Claim 1, wherein the resorcinol arylate polyester has the structure of formula (XIII)



wherein R is at least one of C₁₋₁₂ alkyl or halogen, n is 0 to 3, and m is at least about 8.

5. (Currently Amended) The method of Claim 4, wherein m is about 10 ~~and to~~ about 300.

6. (Currently Amended) The method of Claim 1, wherein the organic polymer has the structure of formula (XIV)



wherein each R¹ is independently halogen or C₁₋₁₂ alkyl, m is at least 1, p is about 0 to about 3, each R² is independently a divalent organic radical, and n is at least about 4.

7. (Original) The method of Claim 6, wherein m is about 2 to about 200 and n is about 30 to about 150.

8. (Cancelled)

9. (Original) The method of Claim 1, wherein the organic polymer is irradiated for a time period of about 30 seconds to about 5 minutes.

10. (Original) The method of Claim 1, wherein the organic polymer is in the form of a film having a thickness of about 1 to about 1,000 micrometers.

11. (Original) The method of Claim 10, wherein the film comprises a single layer.

12. (Original) The method of Claim 10, wherein the film is multilayered.

13. (Original) The method of Claim 1, wherein the irradiation promotes a Fries molecular rearrangement in the organic polymer.

14.-15. (Cancelled)

16. (Original) The method of Claim 1, wherein the organic polymer has a shrinkage of less than or equal to about 5 volume percent when compared with the volume of the organic polymer prior to the irradiation.

17. (Original) The method of Claim 1, wherein the organic polymer undergoes a shrinkage of at least 10 volume percent less than the shrinkage of a hydroquinone polyester when both are subjected to the same amount of irradiation per unit volume.

18. (Original) The method of Claim 1, wherein the organic polymer undergoes a yellowing of at least 50 percent less than the yellowing of a hydroquinone polyester when both are subjected to the same amount of irradiation per unit volume.

19. (Withdrawn) A holographic pattern manufactured by the method of Claim 1.

20. (Withdrawn) An article manufactured by the method of Claim 1.

21. (Withdrawn) A data storage device manufactured by the method of Claim 1.

22. (Withdrawn) A photonic communication device manufactured by the method of Claim 1.

23. (Withdrawn) A waveguide manufactured by the method of Claim 1.